

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: 07202854 A  
(43) Date of publication of application: 04.08.1995

(51) Int. Cl

H04L 1/06

H03M 13/00, H03M 13/12, H04B 7/08, H04B 15/00, H04L 1/00,  
H04L 27/00

(21) Application number: 06195789

(22) Date of filing: 19.08.1994

(30) Priority: 20.08.1993 US 93 109556

(71) Applicant: ERICSSON GE MOBIL COMMUN  
INC

(72) Inventor: CHENNAKESHU SANDEEP  
HLADIK STEPHEN M  
SAULNIER GARY J  
KOILPLLAI RAVINDER D  
TOY RAYMOND L

(54) DECODING METHOD USED FOR  
POST-DETECTION SELECTING/  
SYNTHEZISING DIVERSITY FOR MOBILE  
AND INDOOR RADIO CHANNELS, AND  
POST-DETECTION  
SELECTING/SYNTHEZISING DIVERSITY  
RECEIVER

(57) Abstract:

PURPOSE: To provide metrics to be derived from the phase angle of a received signal in order to evaluate channel state information(CSI), to provide a method eliminating the necessity of a sound signal or a pilot for determining the CSI and to determine the CSI in a system capable of utilizing only a symbol phase angle.

CONSTITUTION: The characteristics of a communication channel are evaluated from a differential phase angle between the phase angle of a received signal and that of a corresponding transmitted signal. Signal-to-impairment ratio (SIR) as an indicator of CSI is

calculated by SIR calculating units 4a, 4b and mutually compared by a selective logic circuit 5 and a receiver branch of a high quality channel is selected by a branch selecting circuit 6. A maximum likelihood evaluation method or an evaluation method integrating mean SIR information for a Rayleigh phasing channel is used for calculation CSI metrics as a function of a differential phase angle between a received signal and a transmitted signal.

COPYRIGHT: (C)1995,JPO

